DIVISION FOR PLANETARY SCIENCES ABSTRACT FORM

Run. No. _____ Sess.No. _____
FOR EDITORIAL USE ONLY

1993 SEB Revival: Expansion Phase

P. A. Yanamandra-Fisher (JPL/Caltech), W. Hoffmann (Steward Observatory, U. of Arizona), A. J. Friedson, G. S,. Orton (JPL/Caltech), L. K. Duetch (U. C. Berkeley/NASA ARC), J. Hera (Institute of Astronomy/U. of Hawaii), G. G. Fazio (Harvard/Smithsonian Center for Astrophysics) and K. Shivanandan (NRL)

Post-SEB revival images of Jupiter were recorded at 4.6, 8.56 and 13.0 μm at Steward Observatory, using the Mid-Irfrared Array Camera (MIRAC) on 3 - 6 June 1993 to map the longitudinal regeneration of the South Equatorial Belt (SEB) at the 250- and 600-mbar and as: deep as 5 bar levels. These observations were recorded almost 2 months after the initial violent and dramatic onset of the SEB Revival, which occurred on 7 April 1993. Longitudinal recovery of the SEB is observed at the 13.0 μm level (near 500-mbar level) and the two equatorial belts (NEB and SEB) appear comparable. The 8.56 μm data, sensitive to the upper NH_3 ice cloud deck, reveal that the SEB is comparable to the NEB throughout the hemisphere preceding of the Great Red Spot (GRS), but has not recovered fully at other longitudes. However, the 4.6 μm data, sensitive to the radiances from the deeper levels of the atmosphere and cloud tops, show that the SEB is reviving as two distinct components – northern (SEBn) and southern (SEBs). The SEBn is evident at all longitudes, albeit very faintly and with a hint of structure, but the SEBs exhibits longitudinal inhomogeneity. These data imply that the SEB revival occurs on different timescales at various pressure levels and is still ongoing.

ORAL PAPER [x] **POSTER PAPER** [ ]

PAPER PRESENTED BY Padma Yanamandra-Fisher
(Please Print, Must be First Author)

SPECIAL INSTRUCTIONS:
Co-locate with any other papers on the SEB Revival of X993.

MS 169-237, Jet Propulsion Lab. P. A. Yanamandra-Fisher
First Author's Address – Print Signature of First Author
4800 Oak Grove Drive, Pasadena,
California 91109
Signature of Introducing Member, if Author is a Non-member
E-Mail padma@lono.jpl.nasa.gov Phone 818 354-2321

Membership Status (Presenter):

DPS-AAS Member [x] **Non-member** [ ] **Student** [ ]

Is your abstract newsworthy, and if so would you be willing to assist our **publicity staff with additional material or interviews for reporters.**

Yes [ ] **No** [ ] **Maybe** [x]

DPS Category 8 (From list on **separate** page)

Abstracts must conform to the AAS style *as* described on the back of **this form. Abstract originals** must be **typed or glued directly onto this form. The charge for publication of this abstract in the** *Bulletin of the American Astronomical Society will* be **included** in **the registration fee for this meeting.**

Deadline for receipt of abstract: July 19, 1993.

SUBMIT ORIGINAL AND FIVE COPIES TO:

DPS Abstracts
Lunar and Planetary Institute
Publications Services Department
3600 **Bay Area Boulevard**
Houston, TX ?7058-1113

FOR EDITORIAL USE ONLY
BAAS VOL. ___ NO ___ 19___

Abstract Submitted for the Division for Planetary Sciences *Meeting*, Boulder, CO, USA
Date Submitted _____ Form Version 2/93